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JULY 1932

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MARKET JOURNAL
Devoted to the Interests
of the Asbestos and
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... ASBESTOS ...

A MONTHLY MARKET JOURNAL
DEVOTED TO THE INTERESTS OF THE
ASBESTOS AND MAGNESIA INDUSTRIES

A. S. ROSSITER

EDITOR

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A S B E S T O S

Asbestos Textiles

BY C. K. DILLINGHAM, Staff Manager,
Sales Engineering Department, Johns-Manville
Corporation

NOTE: This paper was presented by Mr. Dillingham at the 35th Annual Meeting of the American Society for Testing Materials, held in Atlantic City, N. J., June 20th to 24th. We believe our readers will be glad to have this information in their files.

August "ASBESTOS" will contain the Report of the Committee on Asbestos Textiles of the A. S. T. M., and also the Tentative revisions in the Standard Specifications for Tolerances and Test Methods for Asbestos Yarns.

Asbestos, that remarkable mineral born millions of years ago in the volcanic fires of Earth's creation, and formed under the terrific pressures that were set up as the crust of our planet began to cool off, has, as you all know, scores and hundreds of uses. Perhaps one of its most interesting adaptations has been its manufacture into asbestos textiles.

It is not commonly known that the use of asbestos textiles dates far back into ancient times. It was originally known as amianthus cloth and was used by the ancient Greeks and Romans to wrap dead bodies, placed on the funeral pyre, in order to preserve the ashes of the body. It was referred to in many an ancient document as a rare and costly cloth, the funeral dress of kings. Marco Polo, in the thirteenth Century, while travelling in Siberia, was shown cloth made from asbestos which the natives pointed to in wonder because it withstood the action of fire. Plutarch writes of his "perpetual lamp wick" made from Carpathian linen or asbestos.

Because of its ancient and modern place in the textile field, I believe some facts regarding asbestos and its adaptation in textile work will be of unusual interest. While asbestos in various forms occurs in all parts of the world, the general types in which textile manufacturers are interested are three in number, namely, chrysotile, represented by Canadian, Russian, and some kinds of African; the iron free, also chrysotile, represented by Arizona, Australian and one type of African; and the African brown and blue acid-resisting fibres. As Canad-

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ian asbestos is truly representative of the largest group and is probably the most widely known, this paper, because of its limited scope, should be considered as dealing only with Canadian chrysotile asbestos unless otherwise noted.

The asbestos fibre occurs as veins in serpentine rock, varying in width from almost nothing up to a rare maximum of 6 in. The fibres run across the vein so that the width of the vein is the length of fibre. Asbestos mining is in most cases really asbestos quarrying, as blasting is resorted to in order to loosen masses of rock in open pits after which the fibre is removed from the rock in varying ratios of about one ton of fibre to fifteen or twenty tons of material.

As soon as the blast has settled, the grading of the asbestos fibre begins. It is first divided into two main divisions, crude and mill fibres. The crude fibre is obtained by collecting the larger pieces of fibre shaken loose by the blast, and removing by hand the rock still clinging to it. It is then still further sorted according to length, but not with the degree of accuracy that is customary in the grading of cotton and wool, and is then packed in burlap bags and shipped to the point of consumption. The rest of the rock is then put thru the mill at the mine, the rock crushed off, the fibre worked into a soft matted mass, screened, graded and packed as mill or milled fibres.

It is extremely difficult to grade or evaluate asbestos fibre as, with the exception of crude fibre, it is impossible to measure its length, and even if it were possible, the length of the fibre would not tell the story. In order, however, that there may be some specification or standard applicable to the many grades of mill fibre, the various asbestos mines have adopted a standard screen test by which mill fibre is classified into its many grades.¹

While the results obtained by this method of test show considerable variation, it is a roughly accurate method of grading fibre. In the lower grades it determines the value of the fibre more or less accurately, as

¹ Since most of our readers are familiar with the standard method of testing we have omitted description of it.

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it does indicate its cleanliness, but in the higher grades, it takes no account of a quality of asbestos which is extremely important in textiles, packings, filter fibres and possibly high-grade papers and insulations, namely, the natural life and resiliency of the fibre itself. Therefore, in the selection of fibres for textile purposes, to all the mechanical quality tests must be added knowledge of the workability of the different asbestos fibres obtained only thru long experience.

In general we may say that the various grades of crude fibres and the two or three top grades of mill fibres can be used for the production of asbestos textiles. Some asbestos yarns require all crude fibre, due to the severe service to which they are put, others are made from a mixture of crude and mill fibres, while some of the cheaper grades of yarn and wick can be produced almost entirely from mill fibre. When crude fibre is used, the lumps of fibre as received from the mine are crushed and freed from all remaining rock. It is then passed thru a willow which in general consists of two revolving beaters for the purpose of opening and fluffing up the fibres. As the mill fibre needs no further crushing, it is usually only fed thru the willow. If crude and mill fibre are used they are usually mixed at the willow.

The next operation in the production of asbestos textiles is the mixing picker, and it is at this point that the grade or quality of the yarn is determined by the mixture of a certain quantity of vegetable fibre, usually cotton, with the asbestos. Cotton is used to reduce the cost of asbestos yarn to commercial limits. Its great carrying power makes it possible to produce a stronger asbestos yarn from lower grade asbestos or from a higher grade asbestos with less waste than without it, and as there is very little necessity for an all-asbestos yarn, varying amounts of cotton will be found in practically 98 per cent of asbestos textiles. The mixing picker used in asbestos is usually of the heavy Fearnaught type quite unlike the cotton picker or lapper.

In carding, spinning and twisting asbestos yarns special equipment of heavier, more rugged construction must be used than in the case of other textile fibres, but

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in designs and methods asbestos machines more nearly follow the woolen system than any other. It is quite common in the industry to use a breaker and finisher card hooked together by means of a so-called camel-back feed. The asbestos and cotton mixture is delivered to the breaker card by means of a feed box, automatically weighing out a predetermined amount of mix at set intervals. Asbestos roving without twist is commonly taken from the finisher card by means of a ring doffer, wipe roll and rub motion, altho in the case of some of the finer yarns tape condensers replace the ring doffer and wipe roll.

The asbestos roving delivered by the card is spun into yarn by two methods, namely, mule and ring, both producing yarn by the same principle, that is, by twisting the soft roving on its own axis, thereby binding the fibrous mass into a strong compact thread, where formerly it had very little cohesive strength. In the main, mule spinning is used to produce a softer, more pliable single yarn to be later twisted into a plied yarn which can be used in the single on braiders and winders in packings, and in the weaving of fine cloths and tapes. Draft as understood in cotton spinning is not used.

The spun yarn is spooled up and prepared for the twister in the same manner as is commonly found in the manufacturing processes of other textile fibres. An asbestos yarn twister, with the exception of its size and weight, is of the same general type as used in cotton and wool. Asbestos yarns are twisted into ply yarns in the same manner as other yarns, with the addition that a large amount of asbestos yarn has one or more strands of brass or copper wire twisted with a varying number of asbestos plies into what is known as wire inserted asbestos yarn. This name is derived from the fact that wire strands tend to twist towards the center of the yarn.

Asbestos yarns and roving are produced and sold by size or cut and not by diameter. The size or cut of the yarn means the number of 100 yd. to the pound of the single- or one-ply yarn. Thus a 10 cut yarn or roving will average 1000 yds. per pound. Altho asbestos has been

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spun into yarns as fine as 70's the commercial sizes run from 8's to 20's, as there is very little call for the higher counts. With a few exceptions the count or cut jumps 200 yd. at a time, as for example, 8's, 10's and 12's, because asbestos yarn, due to its mineral raw material is recognized as varying considerably in yardage. Tolerances for 14's and finer are accepted as being \pm 100 yd., from the count and \pm 50 yd. for lower counts. It would therefore be rather difficult to determine intermediate cuts or counts as their yardages would at times overlap.

As ply yarns are made by twisting together two or more strands of single yarn whose yardage has already been determined, it is evident that the yardage of a ply yarn will be the yardage of the single yarn divided by the number of plies, less a certain amount for the contraction caused by the twist. Thus a 10 cut 2 ply yarn would have a yardage of 1000 divided by 2 less 40, or approximately 460. As a rule, the yardage of a 2 ply yarn is about 46% of the single ply. If wire is inserted in the yarn its weight also reduces the yardage of the ply yarn, as here again the size of the single-ply asbestos yarn is the governing factor. A wire-inserted asbestos yarn containing three plies of 10 cut yarn and 2 wires is known as a 10 cut 3 ply wire inserted yarn and can be written as 10/3 and 2 or, in common mill parlance, 1032. If the asbestos strands are 10 cut yarn and no other specifications as to size and percentage of wire or weight of finished yarn have been especially agreed upon, the mill has made a good delivery.

The five generally recognized qualities or grades of asbestos yarns are outlined in the Society's proposed revised Specifications for Tolerances and Test Methods for Asbestos Yarn as follows: Grade A-1, a minimum of 77% asbestos; grade A, 80 to 85%; grade AA, 90 to 92%; grade AAA, 95 to 96%; and grade AAAA, all asbestos with a trace usually about 1% of foreign matter permitted. These grades are the result of years of experience in producing asbestos textiles to meet all requirements of industry as cheaply as possible, and in addition to covering all necessary qualities enable the manufacturers

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July 1932

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to utilize in the lowest grades a part of the waste produced in the higher grades. The grade or quality of a wire-inserted asbestos yarn is determined by the grade of the asbestos strands in the yarn, no account whatever being taken of the wire. All tests are made with the wire removed.

A visitor to the weaving room of an asbestos textile mill would probably see the greatest collection of equipment ever brought together in a single textile department. Here asbestos textile fabrics are woven in widths varying from $\frac{1}{2}$ to 124 in., in thickness from 0.015 to more than 1 in., in textures from 6 ends per inch to more than 100, and in weights from $\frac{1}{2}$ lb. per sq. yd. to 6 lb. per sq. ft. For cloths, various of the common types of fly shuttle looms are used, together with some special looms of heavier construction. Asbestos brake linings and asbestos tapes are woven on multiple-shuttle, narrow-fabric looms. Both creel and beam weaving are employed depending on circumstances. In cloths the plain and common twill weaves are the most usual while in brake linings various ply weaves are used. All sizes and grades of asbestos yarns are woven into fabrics.

Asbestos is commonly called fireproof, but a better term would be fire resistant. A sufficiently high temperature can eventually destroy almost everything known and asbestos is no exception. The breakdown of asbestos under heat depends entirely upon the loss of its water of hydration, of which chrysotile asbestos has an average of 14 per cent. The water of hydration begins to leave asbestos just above 600° F. (315° C.) but only at a very slow rate. At 1000° F. (540° C.) about one fourth of it has been driven off, but at this point it begins to go more rapidly so that above 1200° F. (650° C.) it will quickly disappear entirely. After the water of hydration has been driven off the fibre becomes completely calcined and can be crushed to powder. The length of time during which the fibre is subjected to a given temperature has very little effect, the temperature itself being the important factor.

Asbestos has also been called an insulator against

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heat. This is also slightly erroneous. Asbestos in solid form is not an insulator but will transmit heat. When woven into a fabric its insulating qualities are almost negligible if applied directly to the source of heat. As an example, a piece of asbestos cloth laid on a metal plate having a temperature of 900° F. (480°C.) reduced the temperature above the cloth only 35°F. (19°C.). However, asbestos in cloth or other forms does furnish a strong heat-resisting medium around which insulation in the form of enclosed air spaces, for instance, can be built.

In order to give the reader some idea of the temperatures which the various grades of asbestos textiles will safely stand, the following may be stated as a general rule: grade A-1 and grade A, 350 to 400°F. (175 to 205°C.); grade AA, 600°F. (315°C.); grade AAA, 850°F. (455°C.); and grade AAAA, 950°F. (510°C.). These figures must be considered as applying to plain asbestos yarns and cloths without impregnation coating, or treatment of any kind. Special severe conditions may reduce these limits, and, reversely, ideal conditions of service may greatly increase them.

Reference was made previously to iron-free and acid-resistant asbestos fibres. In most chrysotile asbestos, iron is found in both ferrous oxide Fe_2O_3 and free magnetic iron Fe_3O_4 . In some cases where asbestos is used as an insulating wall on electrical wires, the free magnetic iron is objectionable, and for this work a fibre, such as Arizona, Australian, and one type of African, which is free from this form of iron, must be used.

With the exception of the brown and blue African fibres, asbestos is attacked by acids in about the same degree as cotton fibres. From a commercial standpoint weak acids seem to have more effect on the fibre than concentrated acids, except under boiling temperatures, where the action is much increased. In strong hot acid solutions chrysotile asbestos will lose over 50 per cent of its weight. Blue African asbestos stands supreme in acid resistance with a maximum loss of approximately 20%, and the brown African amosite ranks second. Alkalies at ordinary temperatures, up to 20% strength, have no effect on asbestos, and very little effect beyond that.

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The chief outlet for asbestos textiles today is as the raw material for the manufacture of other products such as brake linings and packings, but there is an ever-growing market for asbestos yarns, cloths and tapes in their primary form to be found in their use on insulated wires, gloves, clothing, theatre curtains, filters, conveyor belts, etc. In fact, wherever a soft, pliable, yet strong, heat-resisting medium is needed there is a market for asbestos textiles.

For centuries asbestos was but a curiosity, a mystic mineral. Today, with its possibilities for being spun, woven, felted or molded into useful form, it is a recognized necessity in our modern day world.

Where Do We Go From Here?

BY C. J. STOVER

At least ninety five per cent of "ASBESTOS" readers are personally known to me, and I feel rather well informed as to the problems confronting most of you.

Undoubtedly *all* of us are seeking, day and night, for means whereby our individual business difficulties may be overcome and, surely, chief of these is the question of Sales Volume.

Read the editorial in Collier's for July 9th.

The old U. S. A. has more gold, more savings deposits, more life insurance, more personally owned homes than ever before—even than in 1929, the boom year. It's frozen—for the present—and only for the present.

Keep plugging—devise new uses,—new forms,—new packages,—new sales methods—and some fine day we will all look back in wonderment that we *could* have been so ineffective.

We, meaning myself and staff, and the magazine "ASBESTOS" itself, are here to help—any time, any way, anywhere.

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The Excise Tax and Asbestos Products

The rather indefinite wording of the new tax law, as applying to certain products, has caused quite a bit of discussion among asbestos manufacturers, and several have applied to "ASBESTOS" asking if their particular products are subject to the excise taxes.

We therefore obtained from competent counsel, an opinion which may be of interest. It is as follows:

"The only provision of the law which would appear to apply to asbestos products is Section 606 (6), imposing a tax of 2 per centum upon parts or accessories for automobiles and trucks. It is further provided, however, that this tax shall not apply in the case of sales of parts or accessories to a manufacturer or producer of automobiles or trucks, but that if such parts or accessories are resold by the automobile or truck manufacturer otherwise than on or in connection with an automobile or truck, then the tax shall apply on the sale of such parts or accessories by the automobile or truck manufacturer. In other words in the case of brake linings for example, the tax would apply in the case of sale to a dealer, but would not apply in the case of sales to an automobile manufacturer such as Ford.

"The question of the applicability of this tax to products such as asbestos brake lining was informally presented to the Internal Revenue Bureau who advise that the tax would only apply to brake linings sold as complete articles, that is, sold in the form of single brake linings ready for incorporation in an automobile or truck."

Following this we receive an announcement from the Asbestos Brake Lining Association, to the effect that it has been voted to revise brake lining and clutch facing lists slightly upward, it being felt by the Association, which represents the country's leading manufacturers of friction materials, that this step is warranted by existing conditions; that it will help stabilize the industry and that it will be of material assistance to distributors of brake lining and merchandisers of brake service.

Careful study of the Revenue Act of 1932 since it be-

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came effective, has disclosed innumerable difficulties in the way of passing, to the consumer, thru the wholesaler and dealer, the Manufacturer's Excise Tax on automotive parts and accessories. In order to avoid these difficulties, including the considerable amount of clerical work involved, the Asbestos Brake Lining Manufacturers, thru their Association, have decided to absorb these excise taxes, commencing July 1, 1932.

Tests on Micro-Asbestos as a Filler in Bitumen

Micro-Asbestos¹ is, as most of our readers know, the name of a short fibred asbestos-like material mined by Bernfeld & Rosenberg of Vienna, Austria.

The material is used for various purposes, principally among them being as a filler for rubber, in the paper industry, in paint, and as a filler for asphalt or bitumen. The last seems to be the most important.

For the past three years the Royal School of Mines of the Imperial College of Science and Technology, London, has been conducting experiments with Micro-Asbestos and Scrap Asbestos as Bitumen hardeners in their Oil and Asphalt Testing Laboratories, and have published a report on their findings. A copy of this report is in our possession but it is entirely too long to publish in "ASBESTOS." Any one interested, however may borrow the report and make such notes from it as he may find of value.

The tests endeavored to determine the tensile strength, the ductility, and melting or softening point of bitumens when various fillers, and various percentages of fillers were used, the value of micro-asbestos and scrap asbestos when used in place of other fillers or in conjunction with others fillers; the final result of the many experiments being the preparation of a formula for the manufacture of bitumen grout using fluxed Trinidad Lake asphalt and Micro-Asbestos.

It is impossible to give any adequate idea of the results of these tests here, and we urge any interested reader to ask for a loan of the report long enough to digest it thoroughly.

¹ For further information concerning Micro-Asbestos, see March 1928 "ASBESTOS," page 25; November 1931, page 16; and December 1931, page 40.

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What insulation contractor has not been troubled by shrinkage in aircell insulation? But up until the last two or three weeks there seemed to be no way to overcome this very annoying feature, which resulted in great gaps in the covering after application, letting heat thru to be dissipated in the cellar or other places where it was neither needed nor wanted. Not only that, but when such gaps occurred, very often the insulation contractor was called upon to patch up the job, costing him time and money.

Altho this new Pre-Shrunk covering has been on the market only a week or two, it took five years of research and development in the Johns-Manville Laboratories and Research Department, for the idea to be worked out and put into actual practice.

Ordinary asbestos paper from which pipe covering in the past has been made absorbs moisture very readily and in so doing causes the pipe covering to expand. This moisture is driven off when heat is applied, thus causing the pipe covering section to shrink. The Pre-Shrunk asbestos paper from which this new type insulation is made does not absorb moisture—it therefore will not shrink.

Pre-Shrunk Asbestocel is made in three types—first, regular canvas covered for those who prefer a canvas covering to any other; second, having a cover of heavy asbestos paper over which no canvas is needed; and third, the aluminum finish which is especially useful where attractive appearance is desired. The first two sell at the same price as the old type canvas asbestocel, the third is just a little higher.

The non-canvas covered types naturally require very much less time to apply than that with the canvas cover. In fact in a test made recently, a typical applicer who had never applied the non-canvassed material before, was given two identical lengths of pipe to cover—one with the regu-

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lar canvas covered material, the other with the non-canvas covered pre-shrunk material. It took him 10 minutes 25 seconds to do the job with the canvas covered type, and only 6 minutes, 45 seconds with the high speed non canvas type—a saving of 35.2%.

The second important development is the new Indented Wool Felt, also manufactured by Johns-Manville Corporation. This is made from a special, indented wool felt paper instead of the usual plain paper. The conductivity of this new type product is 25% lower than that of ordinary wool felt and the weight is much less. It also has a Dual-Service liner, making one type of woolfelt adaptable for both hot and cold water service, thus eliminating the necessity of two types of covering on one job. The wool felt is likewise available with canvas finish and aluminum finish, and the price of the canvas type is the same as previously, that of the aluminum finish slightly higher.

Further information and samples can be obtained by any interested reader from the Johns-Manville Corporation.

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FACT AND FANCY

This issue begins our Fourteenth Year. Many changes have occurred during those 14 years in the Asbestos Industry. We hope the information we have given from month to month has been helpful to all. And our highest aim is to serve you even more effectively in the future. Will you help us by announcing your new products *first* in "ASBESTOS," *by sending us news*, and by reading, and getting your employees, and friends in the asbestos industry to read "ASBESTOS" regularly.

Reinforced Asbestos Paper.

Asbestos Paper reinforced with a cotton thread both crosswise and lengthwise, may be new to some of our readers.

The reinforcement is simply to give strength to the paper.

A number of uses have developed where this added strength is found to be very acceptable, in some cases absolutely necessary. It is used for a covering on rock wool blankets where it must be sewed. It has been used in automobile tops, and the wrapping of wires and cables where heavy pulling would destroy the regular asbestos paper.

If any of our readers know of other uses for this reinforced asbestos paper, please let us know about them.

Asbestos in Dress Materials.

Reports from London insist that asbestos fibre is now being used in increasing quantities for the manufacture of dress materials. The idea is that asbestos, woven into ordinary yarn, refuses to take dyes which affect ordinary cloths, and remains white. Fabrics thus treated have the white flecked appearance of other more expensive tweeds and fancy materials. Further information on this would be welcome, and samples of such cloth very interesting to add to our collection.

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86, Yedo Machi,
Kebo.

A S B E S T O S

Comments on the Textile Situation

(Letter written by R. Wild of Chicago, to "ASBESTOS"
under date of June 27th.)

You have constituted yourselves from time to time a forum for exchange of thoughts helpful to the industry—a laudable cause—but, Oh! how futile—not your fault, of course.

Since thought is invited and times show an apparent lack of it, or at least the power to enforce it, maybe what I have to say is like a pint of water dropped in the desert. However, here is hoping!

In your June number, you published a price range on Asbestos Textiles. As a manufacturer who knows cost accounting and economical manufacturing methods, I say unless labor is paid lowest nigger wages, nothing much in the way of profit can accrue. Yet I find nobody even holds to them—indeed, those that need profits surely, judging by financial reports, vie with each other to defy the laws of economies with a flagrant disregard of consequences such as one expects to encounter only in a lunatic asylum.

To be the proud possessor of an order under those circumstances is not an honor but a crime, which endangers the invested capital and those depending on its return—the bulk of them not big capitalists but small investors who tried to put by some savings. It endangers the wage and salary earners—it even affects the tax collector and he will take it out on you some other way—it means cuts and gradual dwindling of purchasing power.

Now, on top comes the new tax increases embracing various phases affecting manufacturing as well as selling. Already difficulties are placed in the way by the Treasury Department to pass some of these down the line. The ultimate sound recourse would be a general advance in price and while that is done, the industry should wake up and realize that its apparent philanthropic tendency in the last eighteen months but leads to slow bleeding to death and "empty bellies"—to use a crude expression—for a lot of

ASBESTOS

ASBESTOS
CORPORATION
LIMITED

THE LARGEST INDIVIDUAL
PRODUCER OF
RAW ASBESTOS
IN THE WORLD



THETFORD MINES

QUEBEC

CANADA

MINES AT

THETFORD MINES
EAST BROUGHTON
VIMY RIDGE

BLACK LAKE
COLERAINE
ROBERTSON

A S B E S T O S

its trained personnel that cost the industry money to produce.

Why throw it all to the winds by imagining that if you cut low enough the other fellow will quit? He won't.

To protect the industry some real constructive action is needed. For its leaders are its guardians and should think in broader terms than just dividends. It can mean new employment and increased purchasing power.

Maybe an amendment of the 18th Amendment may give us the cheery cup to pluck up courage that would be helpful to amend the Sherman Act to get protection for the workers—who are *the Buyers, too.*

Meanwhile, give thought how to stiffen your backbone and quit pussyfooting.

Let's use the phrase of a proven General who, when reports came in that the center could not hold and both flanks were giving way, said: "Let's advance."

Will others write us their ideas of the Textile situation?

A Review of Italy's Asbestos Industry

From Report by VICE CONSUL FRANK C. NICCOLI at Milan to the U. S. Department of Commerce.

Italy produces asbestos only in a few Alpine districts, but the volume of output is sufficient to diminish imports of asbestos and asbestos products. The Alpine fibre is brittle and long, ranging from 50 to 500 millimeters¹ in length. It occurs in large deposits with considerable talcose material which formerly caused much difficulty in extraction. Improved machinery has overcome this condition to some extent, permitting a 25 to 35 millimeter grade to be used for spinning.

It is estimated by one of the Italian producers that the output consists of 30% of the first grade spinning fibre, 20% second grade, 20% selected fibre for special use, 10% cement stock, 10% mill fibre, and 10% of other grades. The classifications are those usually used for the domestic pro-

A S B E S T O S

duet in Italy.

Tabulation of Imports and Exports, comparing 1930 and 1931, is of interest:

	Imports		Exports	
	1930	1931	1930	1931
(All figures in Quintals (1/10 metric ton or 220.5 pounds)				
Crude asbestos, inc. powder	65,761	52,774	3,551	1,451
Asbestos cord	654	562	955	752
Asbestos pasteboard	2,392	2,045	603	526
Asbestos cement slate	669	512	71,742	42,455
Asbestos cloth		258	1,730	72
Asbestos brake lining & discs	1,321	859	123	38
Other manufactured asbestos		814	37,795	33,215

Crude asbestos is admitted free of duty. The marked decline in imports under some classifications is attributable not only to a decreased demand but to the stepping up of the tariff since 1929. Furthermore, these duties, including the recently imposed extra rate of 15 per cent ad valorem, have influenced Italian manufacturers to extend their plants sufficiently to meet a greater proportion of the domestic demand and even to export to the Balkans, Albania, France and the Near East.

The European market for the major asbestos products is rapidly becoming one strictly of price. American products are reported as too high in both quality and price for serious entry on this market as a whole, and specifically in Italy. Woven brake-lining is reported as losing sales ground in competition with the molded type. It is claimed locally that "the molded lining is best adapted for internal brakes, and the woven type for external brakes" and that "buyers of brake linings should at once obtain the following advantages from a molded band, which would wear well and give efficient service: Facility of sale by jobbers and owners of garages; lower rate of duty on molded brake linings having no brass wiring."

As stated, raw asbestos is admitted free of duty, and woven brake lining and woven clutches with brass wiring are subject to a duty of 735 lire per quintal (\$42.56 on 220.5 pounds) plus 15 percent ad valorem. Compressed sheet packing and molded brake lining without brass wire are subject to a duty of \$6.60 a quintal.

A S B E S T O S

M A R K E T C O N D I T I O N S

G e n e r a l B u s i n e s s .

"The outstanding development of favorable character during the past month has been the quieting down of nervousness both here and abroad regarding the soundness of the dollar."

"The arrival of summer has added a seasonal factor to the other conditions restricting business, and trade and industrial activity have both receded further during the past month. Hope is general that this acute summer slackening will mark the stopping point in the long decline, but the prospect for a pickup before the crop movement and cooler weather come along is not very encouraging."

"The automobile industry supplies the best news for June, the figures of output and registrations apparently having equalled or exceeded those for May. Building contracts awarded during the forepart of the month declined under May and the steel industry with its widely varying outlets reflects the dullness of other industries in a decline to 16% of capacity in the latest week reported."

The above is quoted from the National City Bank letter for July, and we believe gives a fair cross section view of the general business situation.

A s b e s t o s . R a w M a t e r i a l .

There was a slight increase in shipments of raw asbestos during June over May. The market, however, continues dull.

M a n u f a c t u r e d A s b e s t o s G o o d s .

Textiles. Little change, if any, has occurred in the Textile situation. The most promising factor is the thinking which is being done by textile interests. May constructive thinking result in better conditions.

Brake Lining. Reports on Brake Lining business during the past month have been so few that we are not prepared to make any authoritative comment on that field. The increase in automobile production in June, and the increase of motoring in general during the summer months should surely show a definite, if temporary, increase in

A S B E S T O S

brake lining business.

Insulation. High Pressure. Demand continues below any like period since the war. General industry must recover before secondary trades like asbestos and magnesia can hope for much improvement. We see faint but definite signs of better times ahead. In the meantime prices are firm and on present volume must advance to avoid loss to manufacturers. We are hopeful that volume will pick up before advances become necessary.

Low Pressure. June was a fairly good month so far as demand was concerned, altho it tapered off the latter part of June and the first week in July. Prices remain about the same. Manufacturers believe the last of July and the beginning of August will show quite a little improvement.

Paper and Millboard. The demand for paper seems to be very slow, but millboard is more active, the latter probably a seasonal condition.

Asbestos Cement Products. There has been practically no change in the situation on asbestos cement shingle sales during the past month, business continuing at about the same rate as for May.

Prices seem to be fairly well stabilized at their present low level, altho other types of roofing continue to go down in price. It is doubtful, however, whether these further reductions on other roofings will seriously affect asbestos sales, as there is undoubtedly great interest in the asbestos cement shingles among dealers who are handling them this year for the first time and their new acquaintance with the asbestos shingle will establish it as a regular item in their lines for the future.

Corrugated and flat sheets are very quiet at present.

The above represents the opinions of various men in the Asbestos Industry who are in touch with the different markets. Your opinions and ideas will be welcomed at all times.

We are informed that the Prince of Wales has accepted the gift of an asbestos flying suit.

In the Market for Large or Small Quantities of
Metallic Yarn Waste — Asbestos Textile Waste — Scrap Cloth
Yarn Cuttings — Loom Sweepings — Cardroom Strippings

N E W A R K W A S T E C O .

55 to 59 River Street

NEWARK, NEW JERSEY

A S B E S T O S

Asbestos for the Construction of Rockets

From Gummi-Zeitung, Germany

Some time ago Engineer Schmiedel released a trial rocket in Austria which, filled with letter mail, travelled a distance of about 2 kilometers (6,561 feet approximately). Inasmuch as this experiment has been very satisfactory, the idea of carrying mail by rockets over long distances has come under further consideration.

Questioned about his rocket, Engineer Schmiedel, among other things, stated that the nozzle of the rocket consisted of "hardened" asbestos this material having been more durable than a ring consisting of a nickel-wolfram-steel alloy which had previously been used. It has not been ascertained whether the material consists of asbestos-cement-slate, or whether asbestos has been worked into a combination of waterglass. Furthermore, the entire rocket was lined with asbestos on the inside, and the collecting chamber of the gases was "smoothed with asbestos between clay." Presumably, asbestos fibres were used which, for want of another binding material had been stirred to a paste by means of clay, and thus worked up.

Inasmuch as the entire rocket, without driving agent and without the load to be carried, does not weigh even 10 kilograms (22 pounds) only small quantities of asbestos are involved in the construction of a rocket at this time. However, the future of the rocket is visualized as a fast mail carrier between Europe and America, and for this reason the matter will only become of importance for our line of business "after the rocket mail is no longer something strange."

Trend in building design is toward a "thin, temporary look" obtained by the use of materials actually very strong and durable, or at least so say the building engineers for the 1933 Century of Progress Exposition at Chicago.

One of the materials endorsed for durability, fire resistance and strength, is quarter inch thick asbestos cement board.

— A S B E S T O S —

Asbestos Fibres

of

SUPERIOR QUALITY

from the

**DANVILLE DISTRICT
CANADA**

Address Inquiries to

Nicolet Asbestos Mines Limited

Inc.

30 Broad Street, New York

CABLE ADDRESS

NICOBEST NEW YORK

Sole European Distributors

Compagnie Commerciale De Minerais
Et Matieres Premieres

74 QUAI DE JEMMAPES

PARIS, FRANCE

A S B E S T O S



PLANT A SEED HERE AND THERE

We read a story the other day which goes something like this:

In a fair sized middle western town, where the business men were unusually up and doing, one of the business clubs met for luncheon.

During a discussion of business conditions in general, some one in the group remarked that more salesmanship, more alertness, on the part of salesmen or anyone else having anything to sell, would decidedly help business. After some talk they decided to try a little experiment. They selected ten men, gave each man \$10.00, and asked them to go into any store in the community, each man to a different store, and purchase a small 10c or 25c article. If the clerk who waited on them suggested their buying something else, they were to do so, and keep on purchasing at the clerk's suggestion and only on his suggestion, until the \$10.00 was spent.

The plan was carried out and report was made at the next weekly meeting of the club. It was astounding how little the men had spent. Many not more than the 10c or 25c for the initial article.

The clerks had lost a fair sized sale; the stores had each lost \$10.00 worth of business, all because the clerks did not have the interest, either in the business or in their customer, to try and sell more than the small article asked for.

Try it out yourself. The next time you go into a store to purchase something, just note whether the clerk suggests other merchandise, or whether he, as so often happens, contents himself with the remark "Anything else?" A few such trials will convince anyone that more business can be gotten by a suggestion here and there.

The seller of insulation can sometimes land an order for roofing (if he happens to handle roofing) at the same time he takes the insulation order. Or he can suggest wallboard for the kitchen, bathroom or basement. Or he may see that other insulation in the building is in bad condition and get a replacement order.

Of course a suggestion doesn't always result in an order—at least not immediately, but a seed once planted may bear fruit later on.

A S B E S T O S

TEXTILE PRODUCTS



ROVING, YARN, CORD, THREAD

BRAIDED AND WOVEN TUBING

ASBESTOS CLOTHS FOR EVERY PURPOSE

FIRE RETARDANT CURTAINS

VALVE STEM, HIGH PRESSURE AND

SHEET PACKING

DIE-FORMED PACKING RINGS

BRAKE LINING — CLUTCH FACINGS



**ROVING, FINE YARN, CORD AND LISTING MADE
FROM NON-FERROUS FIBRE**



GENERAL ASBESTOS & RUBBER DIVISION

OF

RAYBESTOS - MANHATTAN, INC.
NORTH CHARLESTON, S. C.

A S B E S T O S

WAGE NOTES

Chicago, Ill. Our June issue stated that the wage rate for asbestos workers in Chicago was now \$1.30. This was incorrect. The present wage rate is \$1.37½.

San Francisco, Calif. Wage rate for Asbestos Workers, mechanics, is now 80c an hour. The former rate was \$1.00 an hour.

Boston, Mass. Asbestos Workers in Boston have taken a voluntary cut of 25c an hour, making the present rate \$1.25, instead of \$1.50 per hour as formerly. The new rate went into effect on June 1st.

AUTOMOBILE PRODUCTION

Automobile production during May 1932 totalled 193,370 in the United States and Canada; for May 1931 the total was 329,901; while for April 1932 the total was 155,136.

March 1932 production was 127,277, therefore the last two months have shown increases, which is quite encouraging.

ASBESTOS STOCK QUOTATIONS

(Figures supplied thru the courtesy of Edward G. Wyckoff and Company, 1528 Walnut Street, Philadelphia, Pa.)

June 1932

	Par	Div.	High	Low	Last
Asb. Corp. (Com.)	np	-	-	-	9c
Asb. Corp. (Pfd.)	100	7	-	-	9c
Carey (Com.)	100	5		No Sales	
Carey (Pfd.)	100	7		No Sales	
Certaineed (Com.)	np	-	2	1	1
Garlock Packing (Pfd.)	np	-		No Sales	
Garlock Pkg. (Bonds)	100	6	60	60	60
Johns-Manville (Com.)	np	-	14½	10	11½
Johns-Manville (Pfd.)*	100	7	50	40	50
Raybestos-Manhattan Inc. (Com.)	np	1	5¾	3	4½
Ruberoid (Com.)	np	4	20	14½	19½
Thermoid (Com.)	np	-	1½	¾	1¼
Thermoid (Pfd.)	100	7		No Sales	
Thermoid (Bonds)	100	6	31¾	24½	25

*Ex Dividend

ITALIAN

FINE YARNS — CLOTHS — TAPES

ITALIAN ASBESTOS FIBRE

MANUFACTURED BY:—

SOCIETA ITALO RUSSA
PER L'AMIANTO

AGENTS:—

BERTOLAIA & GOEDERT
24 VARICK ST., NEW YORK

A S B E S T O S

The New Emsco Ideal Woven Molded Brake Blocks

The announcement of Emsco Ideal Woven Molded Brake Blocks has created a tremendous amount of interest thruout the automotive trades. The blocks are a new form of Emsco Ideal woven-molded material, and have been thoroly tested in actual service.

Emsco Ideal, the original Woven-Molded Brake Lining acquired such a wide and favorable reputation among the trade that a demand for brake blocks of the same material was soon created. These blocks have been in service for a considerable period of time and have given exceptional road tests—for example, large buses operating from Los Angeles across desert and mountain country, and equipped with Emsco Ideal Woven-Molded Brake Blocks, up to this writing have covered 50,000 miles with no sign of appreciable wear on the blocks. It is practically assured that they will record 100,000 or more miles of service.

Emsco Woven Molded Brake Blocks are made in nickel steel, forged molds, in which the thick woven impregnated material is compressed under 1400 tons pressure into correct shape and exact size for bus and truck brake shoes. Further information will be supplied upon application to the Emsco Asbestos Company, Downey, Calif.

Warpage Deflects a Large Market

A house of steel construction, providing heat and sound insulation and fire protection, at no greater cost than frame construction, is the goal toward which a large manufacturer of sheet steel is working.

The house, when finished, would be the last word in economy, insulation and durability, and so far as architecture is concerned would be in advance of present architectural styles.

An asbestos sheet was to be combined with the steel for the exterior walls, but unfortunately the designers of

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the house have thus far found it impossible to obtain an asbestos material which could be guaranteed against warpage when used as an exterior wall finish. The idea of the asbestos exterior therefore has been abandoned, for the present, until some way can be found to compensate for warpage, or until someone can supply an asbestos tile or board which will not warp.

Such a house will undoubtedly open up a very attractive market for asbestos cement materials, both inside and out, a sufficiently large market, we should think, to make it worth the while of the various manufacturers, either individually or collectively, to try to find a solution to the problem.

Name and address of the experimenting company, and other data will be supplied to anyone interested.

Some months ago "Asbestos" suggested that salesmen and others in the asbestos industry desiring positions, file their names with this office, and that those needing men apply here.

At the present time we have the names of nine salesmen on file, and we have had calls for three salesmen.

We have also assisted in locating a boss weaver for one of the manufacturing companies.

As business gets better and more men are needed the service should be valuable both to men desiring positions and to employers needing men.

Asbestos materials were well represented at the recent Convention of the National Association of Master Plumbers held in the Madison Square Gardens, New York, June 20 to 23. The line of Modern Insulations,—Cell-O-Tone, Thermo-Lux and Norwol manufactured by the Norristown Magnesia & Asbestos Company, gave that organization an opportunity to display one of the most attractive and colorful booths at the show. Interest shown in these pipe coverings indicates that color and speed of application will be the style for the 1932 heating season.

A S B E S T O S



Africa (Rhodesia).

(Statistics published by Rhodesia Chamber of Mines)

April 1932

	Tons (2000 lbs.)	Value
--	---------------------	-------

Bulawayo District

Nil Desperandum (Afr. Asb. Mng. Co. Ltd.)	270.00	£3,375	..
Shabanie (R. & Gen. Asb. Corp. Ltd.)	1,120.25	14,003	2 6
<hr/>			
Gath's and King (Rho. & Gen. Asb. Corp. Ltd.)	327.07	4,088	8 9
Regina A (Afr. Asb. Mng. Co. Ltd.)	22.95	286	17 6
	<hr/>	<hr/>	<hr/>
	1,740.27	£21,753	8 9

Africa (Union of South).

(Statistics published by Dept. of Mines & Industries of U. of S. A.)

April 1931

April 1932

	Tons (2000 lbs.)	Value	Tons (2000 lbs.)	Value
--	---------------------	-------	---------------------	-------

Transvaal

Amosite	286.90	£ 2,869	75.00	£ 750
Chrysotile	868.00	12,222	571.00	4,460
<hr/>				
Cape Blue	319.77	9,890	166.95	3,308
	<hr/>	<hr/>	<hr/>	<hr/>
	1,474.67	£24,981	812.95	£8,518

Canada.

(Statistics published by Bureau of Mines, Province of Quebec)

May 1932

Tons (2000 lbs.)

Production—Divided by Grades:

Crude No. 1	1
Crude No. 2	5
Other Crudes	..
Spinning Fibres	424
Shingle Stocks	1,338
Paper Stocks	1,548
Waste, Stucco, or Plaster Materials	3,397
Refuse and Shorts	3,259
	<hr/>
	9,972
By-Products (Sand, Gravel, etc.)	581
Production May 1931	12,106
Production April 1932	8,830

A S B E S T O S



Imports Into U. S. A.

Unmanufactured Asbestos.

	May 1931	May 1932		
	Tons (2240 lbs.)	Value	Tons (2240 lbs.)	Value
Africa (Br. S.)	77	\$ 7,386	.....	.....
Africa (Port. E.)	108	24,000	.....	.....
Canada	8,945	280,484	8,060	\$188,417
Russia	208	20,975	.....	.....
United Kingdom	241	49,258	.....	.....
	<hr/> 9,579	<hr/> \$382,103	<hr/> 8,060	<hr/> \$188,417

All the above is Crude except the material from Canada which is divided as follows:

	May 1931	May 1932		
	Tons	Value	Tons	Value
Crude	35	9,280	1	400
Mill Fibre	3,913	194,013	2,919	128,977
Lower Grades	4,997	77,191	5,140	59,040
	<hr/> 8,945	<hr/> \$280,484	<hr/> 8,060	<hr/> \$188,417

Manufactured Asbestos Goods:

	May 1931	May 1932		
	Pounds	Value	Pounds	Value
Yarn—				
United Kingdom	996	\$ 543	1,239	\$ 545
Fabrics, Woven—None.				
Packing, Fabric—				
Germany	232	139	.....	.....
Italy	54	78	.....	.....
United Kingdom	4,533	2,673	1,550	770
Packing, not Fabric—				
Canada	15	5	.....	.....
Germany	778	165	.....	.....
Hungary	789	263	.....	.....
United Kingdom	1,581	1,054	.....	.....
Brake and Clutch Lining—				
Germany .....	.....	.....	2,222	438
Paper and Millboard—None.				
Shingles of Asbestos Cement—	91,350	1,260	.....	.....
Lumber of Asbestos Cement—None.				
Articles in part of Asbestos, colored, etc.—				
Belgium	3,400	102	.....	.....
France	198	18	.....	.....

A S B E S T O S

	May 1931 Pounds	Value	May 1932 Pounds	Value
<i>Pipe Covering and Asbestos Cement—</i>				
United Kingdom	85,599	9,432	.....	.....
<i>Other Manufactures—None.</i>	.....	.....	.....	.....
	189,525	\$15,732	5,011	\$1,753

Exports from U. S. A.

During April¹ 1932, 104 tons of Unmanufactured Asbestos, valued at \$7,375 were exported; 85 tons, valued at \$5,109, were exported during April 1931.

Exports of Manufactured Asbestos Goods:

	April ¹ 1931 Pounds	Value	April ¹ 1932 Pounds	Value
Paper, Mbd. and Rlbd.	116,596	\$11,410	57,154	\$ 3,794
Pipe Covg. and Cement....	353,405	19,849	113,955	4,732
Textiles, Yarn & Packing	156,574	82,109	82,103	40,082
Brake Lining .....	.....	37,772	.....	36,423
Molded & Semi-molded ..				
Not molded ²	521,360	98,673	156,297	26,925
Magnesia & Mfrs. of	361,262	24,612	62,842	5,194
Asbestos Roofings ³	804	4,869	2,455	3,565
Other Manufactures	301,088	28,781	139,138	20,664

¹ Exports one mo. behind imports. ² Lin. ft. ³ Squares.

Imports and Exports by England.

Imports of Raw Material.

	May 1931 Tons (2240 lbs.)	Value	May 1932 Tons (2240 lbs.)	Value
From Africa (Rhodesia)	1,298	£42,606	738	£15,148
From Canada	511	6,359	69	1,292
From Africa (Union of South)			520	8,497
From Cyprus			140	2,400
From Germany	935	25,643	125	752
From Italy			5	35
From U. S. of America			49	386
	2,744	£74,608	1,646	£28,510
Re-shipments	100	2,975	5	153

Exports of Manufactured Asbestos Goods.

To Netherlands	40	3,736	30	2,262
To France	47	5,026	7	1,736
To U. S. of America	5	1,146	..	383
To British India	647	11,870	136	6,877
To Australia	7	1,074	20	3,972
To Other Countries	1,186	53,680	729	43,296
	1,932	£76,532	922	£58,526

A S B E S T O S

Exports of Raw Asbestos from Canada.

	May 1931		May 1932	
	Tons (2000 lbs.)	Value	Tons (2000 lbs.)	Value
United Kingdom	163	\$ 12,095	128	\$ 9,850
United States	3,609	185,244	2,621	146,780
Australia	50	3,500	56	3,300
Belgium	435	24,182	195	8,197
France	326	26,691	237	18,195
Germany	927	70,526	125	6,475
Italy .....	.....	.....	30	3,645
Japan	258	15,190	172	7,680
Netherlands	149	9,510	.....	.....
Spain	50	3,100	44	2,890
	5,967	\$350,038	3,608	\$206,922
<i>Sand and Waste—</i>				
United Kingdom	195	4,740	10	188
United States	6,438	87,663	4,702	67,274
British India .....	.....	.....	30	285
Belgium	30	750	60	1,080
France	175	3,510	60	750
Germany	155	3,691	30	540
Italy .....	.....	.....	28	700
Japan	10	200	10	125
Netherlands	63	1,575	.....	.....
	7,066	\$102,129	4,930	\$70,942
	13,033	\$452,167	8,538	\$277,864

Federal Specifications for Insulating Board

The Federal Specifications Board of Washington, D. C., is submitting for comment and criticism, tentative specifications for

Fibre Board, Insulating, Structural
Wallboard; Composition
Felt, Insulating, Semi-rigid
Blanket, Insulating, Flexible

While all of these materials are not composed of asbestos, the asbestos industry will be interested in most of them, and copies of the tentative specifications can be obtained from the Federal Specifications Board or from "ASBESTOS."

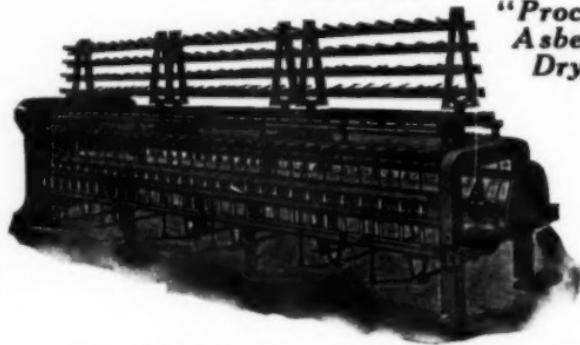
Criticisms or suggestions for changes in such specifications should be received by Board not later than July 31.

— A S B E S T O S —

ASBESTOS YARN MACHINERY

"Smith-Furbush"

"Proctor"
Asbestos
Dryers



PROCTOR & SCHWARTZ, INC.

*Formerly Smith & Furbush Machine Co.
Seventh St. & Tabor Rd., Philadelphia, Pa.*

**High-Grade Asbestos
Textiles**

CARDED FIBRES

YARNS. CORD, MANTLE YARNS

PLAIN AND METALLIC CLOTHS

BRAIDED AND WOVEN TAPES

BRAIDED TUBINGS

WOVEN SHEET PACKINGS

WOVEN BRAKE LININGS

GLOVES, MITTENS, LEGGINS

GASKETS, SEAMLESS AND JOINTED

PACKINGS, STEM AND HIGH PRESSURE

WICK AND ROPE

ASBESTOS FIBRE SPINNING COMPANY

NORTH WALES, — PENNA.

ASBESTOS

NEWS OF THE INDUSTRY

Birthdays. It is a great pleasure this month to extend congratulations and best wishes to the following gentlemen whose birthdays occur before the next issue of "ASBESTOS" is printed: Thomas L. Gatke, President, Gatke Corporation, Chicago, Ill., who celebrates his birthday on July 16th; Ray L. Smith, President, Smith-Faris Co., Youngstown, Ohio, July 20th; H. C. Bonney, Vice President, Ruberoid Co., New York City, July 24th; George R. Weber, Treasurer, United States Asbestos Division, Manheim, Pa., July 25th; E. H. Pierce, Secretary, Plant Rubber & Asbestos Works, San Francisco, Calif., July 27th; S. R. Zimmerman, President United States Asbestos Division, Manheim, Pa., August 1st; William G. Kitchen, President, Allbestos Corporation, Philadelphia, Pa., August 2nd; A. P. Keasbey, President, Robert A. Keasbey Co., New York City, N. Y., August 6th; Paul C. Collopy, President, Acme Asbestos Covg. & Flooring Co., Chicago, Ill., August 8th; Grant V. Wilson, President, Grant Wilson, Inc., Chicago, Ill., August 11th; and O. W. Trumbull, Production Manager, Gatke Corporation at North Brookfield, Mass., August 12th.

Hall & Nielsen, Ltd., of Bury, Lancashire, England, manufacturers of Bramec Brake Linings, announce a new flexible Brake Lining, called the "Sylvagrip." It is stated that this lining has been produced to satisfy the most exacting requirements of modern braking, to eliminate the scoring of brake drums, to minimize replacements and to give perfect braking under all conditions, and further, that it has been introduced to the export trade only. List prices for this lining are slightly lower than those of "Bramec."

Canadian Asbestos Company of Montreal, P. Q., Canada, announce a new Packing Catalog—devoted exclusively to Canasco Packings. Anyone interested in packings can no doubt obtain a copy of the catalog by dropping a line to the Canadian Asbestos Company at 316 Youville Square, Montreal.

Russell Manufacturing Company of Middletown, Conn., has recently been reporting some rather unusual orders. One was the six months' contract for the supplying of brake linings on all police cars and motorcycles for the City of Indianapolis, Ind.; a second an order for 54,000 clutch facings from a Detroit manufacturer; and the third the relining of the brake shoes of the small, fast landing airplanes hangared inside the Navy dirigible Akron.

Rosey Cross Asbestos Mines of Rhodesia. Under the compulsory liquidation of the Rosey Cross Asbestos Mines the report of the Official Receiver shows liabilities £2,609 to rank against assets of £2,938, and a deficiency of £61,867 with regard

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- (a) Textiles,
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- (c) Boiler and Bulkhead Blocks,
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A S B E S T O S

to contributories, the issued capital being returned at £62,196. The company acquired five mining claims known as Rex, Rosey Cross, St. Anthony, Price and Priceless for 900,000 1s. shares. It appears that a large number of the shares have been purchased by the public at a substantial premium. The position regarding the company's title to the properties in Rhodesia is obscure. The company's funds have been utilized to a very large extent in providing loans to Roby and Cheetham, Ltd., which is a debtor to the company in £6,166. The failure is attributed to the collapse of the asbestos market.

The Tasmanian Asbestos Company, has been formed in Melbourne, Australia, according to report in *The Electrical Times* of that city. Capital is £60,000, and the company will produce asbestos at Beaconsfield, Tasmania, the product to be sent to manufacturing works already established in Western Australia and New South Wales. It is possible that this company is the same as that mentioned in our May issue under the name of the Asbestos Mining Company.

European Cartel. A meeting of the constitution members of the European Cartel was called for July 6th in London, and it is understood that all the Canadian Asbestos Producers were to be present. No report of the meeting is available at time of going to press.

Allbestos Corporation of Philadelphia, Pa., have moved their complete stock of brake products from St. Louis to larger quarters in Kansas City. Jobbers in the Central Western States will hereafter be served from the Allbestos Warehouse located at 1739 McGee Street, Kansas City.

Pipe and Boiler Covering Employer's Association of Chicago, at meeting held June 22nd, elected the following officers: President, H. W. Grebe of Central Asbestos & Magnesia Co.; Vice President, John J. Krez, of Paul J. Krez Company; Treasurer, M. J. Fitzgerald of Standard Asbestos Mfg. Company; Secretary, W. J. Donahoe.

Members of the Arbitration Board were also appointed. They are as follows: H. W. Grebe, W. J. Bristow, John J. Krez, Frank P. Kuchenbecker, M. J. O'Malley.

Vermont Asbestos Corporation. F. E. Byrnes, Vice President of the Vermont Asbestos Corporation, recently spoke to the Rotary Club of Rutland, Vt., on the subject of asbestos. This sort of publicity is very helpful to the Asbestos Industry.

Rhodesia Chrome & Asbestos Co., Ltd. Report of directors and statement of account of this company for the year ended December 31, 1931, is now published. Annual meeting was held June 4th. The capital of the company remains unchanged and no properties were acquired, abandoned or sold during the year. Nor has there been any change in the company's investments, which mainly consists of 285,000 fully paid up shares of £1 each in the African Chrome Mines, Ltd., the owners of the most extensive

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and valuable chrome deposits in Southern Rhodesia. The expenditure for the year amounted to £3,332/8/9 as compared with £7,492/8/- for the previous 12 months. Digby W. Burnett and Sir E. W. S. Montagu, Kt., retire, in accordance with the Articles of Association, but, being eligible, offer themselves for re-election.

Cape Asbestos Company, Ltd., London. Report of the Directors for the year ended December 31, 1931, has been issued, the annual meeting having been held on June 17th. Sir Evelyn Wallers, K. B. E. (chairman of the company) presided. The accounts show a profit, after provision for Taxation, Bad Debts, of £13,141/9/1, to which can be added a balance brought forward from 1930 of £21,164/18/1, or a total of £34,306/7/2. From this a dividend of 5% has been paid on the Preference Shares, and the Directors have recommended a dividend of 4% on the Ordinary Shares.

A copy of the Balance sheet follows:

ASSETS

Cash at Bankers on Deposit and Current Accounts, Govt. Treas.	£ 73,124	8	4
Bills and Cash in hand	10,503	14	6
British Govt. Securities at Cost	7,059	12	0
Bills Receivable	20,871	14	6
Sundry Debtors, less Reserves	78,270	15	6
Amounts Due by Subsidiary Companies	55,364	4	11
Holding in Subsidiary Co. at cost less amt. written off	22,739	12	8
Freehold Land and Factory at Turin at cost less depr.	44,278	8	4
Freehold Land and Factory at Barking at cost less depr.	39,193	10	8
Asbestos Estates in South Africa at cost less depr.	12,357	16	5
Machinery, Plant, Buildings, Furniture at cost less depr.	107,422	11	6
	£ 471,186	8	10

Capital Account.

LIABILITIES

Authorized : 150,000 Ordinary Shares of £1 ea.			
150,000 Cum. 5% Part. Pref. Shs. £1 ea.			
Issued : 125,000 Ord. Shares of £1 ea.	125,000	0	0
125,000 Cum. 5% Part. Pref. Shs. £1 ea.	125,000	0	0
Reserve Fund, less Utilized to provide for trading loss of Subsidiary Company	130,000	0	0
Employees' Benefit Fund	14,362	7	10
First Mortgages and Pur. consideration payable prop. in S. A.	7,051	2	8
Sundry Creditors	14,635	9	3
Provision for Income Tax and Contingencies	11,206	14	8
Exchange Reserve	9,624	7	3
Profit and Loss Account—Bal. brt. forward from last year	21,164	18	1
Add Profit for the year 1931	13,141	9	1
	£ 471,186	8	10

In presenting this balance sheet, Sir Evelyn Wallers, Chairman, commented on the various items and summed up the situation in the following words: "With regard to the future, the outlook at present is uncertain, but if conditions necessitate patience, they certainly do not justify pessimism. The asbestos industry has remarkable vitality in that research is opening up new fields for its application. The financial position of our company is strong, and the quality of our products is probably higher today than it has ever been."

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C. H. Stedman, Jacksonville, Fla., handler of asbestos and magnesia materials, passed away on Monday, June 20th.

The Pacific Coast Asbestos Association held its semi-annual meeting at the Winthrop Hotel, Tacoma, Wash., on June 23rd and 24th. The meeting was devoted principally to presentation of papers and discussion relative to improving relations between the industry's manufacturers and distributors.

The annual meeting of the Association will be held in San Francisco in November.

Keasbey-Mattison Construction Company of New York, Inc., has been appointed by the Keasbey & Mattison Company of Ambler, Pa., as their preferred contractors for the Metropolitan Area. The officers of the new company are E. C. Nankervis, President; J. H. Nankervis, Vice President and Miss Teresa Alburn, Secretary and Treasurer. Both E. C. and J. H. Nankervis have been in the employ of the Keasbey & Mattison Company in the contract department for over twenty-five years, and during the past seven years have acted as Contract Manager and Superintendent respectively.

William S. Lang, veteran salesman in the Metropolitan Area has connected with the new company as one of its Directors.

Empire Asbestos Products, Inc., has entered into the asbestos manufacturing field at 376 Jerome Street, Brooklyn, N. Y., and will handle Asbestos Paper, Millboard, Aircell, Magnesia and Wool Felt Covering, but will particularly specialize in the manufacture of Asbestos Pipe Covering. Jacob P. Epstein, President, who has been engaged in the production and traffic of Asbestos Products for the past ten years, states that they will make every endeavor to build up a reputation based upon a high standard of quality, prompt and efficient service.

PATENTS

Brake Lining Stretcher. No. 1,852,907. Granted on April 5th to John B. Tripp, Jr., Trenton, N. J. Filed August 16, 1930. Serial No. 475,818. Description upon request.

Gasket. No. 1,853,175. Granted on April 12th to Frank J. Oven, Chicago, Ill., assignor to Victor Mfg. & Gasket Company. Filed July 19, 1926. Serial No. 123,437. Description upon request.

Cement Product. No. 1,856,570. Granted on May 3rd, to John W. Ledebuer, Ambler, Pa., assignor to Ambler Asbestos Shingle & Sheathing Company. Filed August 29, 1930. Serial No. 478,772.

Described as the process of producing a slab or sheet comprising mixing fibre-cement composition in the form of a slurry and picking up a wet adhering film of fibre-cement from said slurry, accumulating a plurality of said films in face to face contact in a slab or sheet and with the intermeshed fibres extending in a direction parallel to said slab or sheet, subjecting said slab or sheet in plastic condition to pressure of an im-

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pervious surface on one face in a direction at right angles to the plane of said films, while retaining the fibre-cement and permitting escape of contained water on the opposite face, and then permitting said sheet or slab to set while supporting it against distortion.

Heat Insulating Structure No. 1,856,881. Granted on May 3rd to Victor J. Moss, Brooklyn, N. Y. Filed December 28, 1929. Serial No. 417,066.

Described as a heat insulating structure embodying in combination a heat insulating element composed of a light porous material of low structural strength, a frame composed of a material having relatively high structural strength, surrounding the edge of said insulating element and walls of an odorless, non-porous, moisture and air-tight sealing paper arranged on the opposite sides of said insulating element and having an adhesively sealed connection with the frame to provide an air and watertight sealed compartment with said insulating material contained therein.

Brake Band Lining. No. 1,857,108. Granted on May 3rd to Dudley A. Dom, Wyoming, Ohio, assignor to Philip Carey Mfg. Company. Filed November 30, 1928. Serial No. 322,886.

Described as a friction material composed of a woven fabric having threads containing reinforced asbestos paper in which the reinforcement is integral with the paper.

Friction Brake Shoe. No. 1,857,125. Granted on May 10th, to Tracy F. Brackett, New York, assignor to American Brake Materials Corporation, New York. Filed Oct. 19, 1928. Serial No. 313,509.

Described as a friction block for friction brakes, comprising a metal back plate and a composition body mounted thereon, said back plate projecting beyond the body at the ends thereof and a laterally extending tongue stamped from each projecting end of the block within the marginal edges thereto, the tongues of the block being oppositely directed.

Composite Insulating Material. No. 1,857,586. Granted on May 10th, to Jos. M. Coffey, Schenectady, N. Y., assignor to Mica Insulator Company, New York City. Filed October 12, 1929. Serial No. 399,366.

Described as a commutator ring having its outer surface of mica plate prepared by cementing mica flakes together with glyptal, said ring having its inner surface of asbestos impregnated with shellac.

Brake Testing Device. No. 1,857,773. Granted on May 10th to Carl E. West, Watertown, Wis. Filed March 25, 1929. Serial No. 349,640. Description upon request.

Cardboard Machine. No. 1,859,986. Granted on May 24th to Arthur B. Saunders, Nashua, N. H., assignor to Johns-Manville Corporation. Filed March 3, 1930. Serial No. 432,625. Description upon request.

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Power Belt. No. 1,860,269. Granted on May 24th to Robert J. Stokes, Princeton Township, Mercer Co., N. J., assignor to Thermoid Rubber Company, Trenton, N. J. Filed September 30, 1930. Serial No. 485,511. Description upon request.

Splice and Method of Splicing Belts and the Like. No. 1,859,468. Granted on May 24th to Daniel Repony, Clifton, N. J., assignor to Raybestos-Manhattan, Inc., Passaic, N. J. Filed September 25, 1931. Serial No. 565,149. Description upon request.

Apparatus for Manufacturing Brake Linings and the Like. No. 1,859,726. Granted on May 24th to Alfred von Dosky, Plauen, Germany. Filed April 4, 1930. Serial No. 441,686, and in Germany, April 30, 1929.

Described as an apparatus for producing brake bands, linings or the like, from an endless band comprising a rotary drum having a circumferential curvature substantially equal to the curvature of the finished brake lining, a U-shaped housing parallel and concentrically surrounding the periphery of the drum and spaced therefrom to accommodate the band, and a plurality of projection on the periphery of the drum adapted to aid in forcing the band thru the space between the drum and the housing and to mark the band to indicate the exact locations for the securing perforations.

Clutch or Brake Lining. No. 1,860,147. Granted on May 24th to S. Hadley of Chicago, Ill. Filed November 14, 1930. Serial No. 495,564.

Described as a friction liner for brakes, clutches and the like, comprising an oil impregnated, one piece single ply woven strip havng a central oil groove, woven in its face and spaced rivet apertures thru the strip along said groove, whereby the rivet heads may be sunk below the plane of the face.

Underground Conduit System. No. 1,861,436. Granted on June 7th to Murray Alvin Collins, Jersey City, N. J., assignor to Johns-Manville Corporation. Filed October 5, 1928. Serial No. 310,615. Description upon request.

Shingle. No. 1,862,500. Granted on June 7th to Herbert Abraham, New York City, assignor to Ruberoid Company. Filed June 1, 1931. Serial No. 541,246.

Described as a shingle adapted to be laid with a side lap of different widths, said shingle being substantially rectangular in form, and having a guage in one upper corner for indicating the different widths of laps with which the shingle should be laid and a perforation in the opposite upper corner for the reception of a fastening nail, the particular width of lap with which the shingle is to be laid being determined by bringing the nailing perforation of an overlapping shingle into position with that part of the lap gauge of an overlapped shingle that indicates a lap of the desired width, said shingle being so arranged that the overlapping shingle is supported in the immediate vicinity of its nailing perforation by a portion of the overlapped shingle.

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THIS AND THAT

We have been wondering how the asbestos motor bodies were coming along. Now we learn that there has been some difficulty in marketing this product, mostly, we understand, financial. We expect to have a further report on these motor bodies within the next few months.

Brake Service, that instructive little magazine published especially for brake service men, warns its readers against trying to salvage greasy brake lining by burning the grease out of it with a blow torch. Naturally asbestos breaks down under the intense heat of a blow torch, and renders the lining practically useless for further service.

A Brake Lining Manufacturer estimates that 30% of the automobiles in operation will need brake lining this year. This means 6,737,219 relining jobs requiring an average of 8 ft. of lining and costing about \$12 each. A total of 53,897,752 lineal feet of brake lining and a total of \$80,846,628 (trucks not included.) However, tho the business may be there, it will probably take a deal of a lot of work to get it out in the open and actually on the order books. That's where the salesman's opportunity lies.

One of the jobbers of Ruseo Brake Linings (made by the Russell Manufacturing Company of Middletown, Conn.) has organized a baseball team. The suits carry the words "Ruseo Brake Linings."

The new Nash cars are said to use asbestos as an insulation for their dual exhaust silencers. The silencer consists of two complete devices to eliminate sound, the first muffler chamber similar to a Maxime silencer, absorbing exhaust sounds at their source. The second chamber is a resonator which takes away the throbbing impulses not already damped out in the silence chamber. The entire unit is doubly insulated with asbestos.

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